```
PLEASE ENTER HOST PORT ID:x
LOGINID:d184sez
PASSWORD:HHHHHHHHHIIIIIIIII########kirsten
PASSWORD:HHHHHHHHHIIIIIIIII#########
TERMINAL (ENTER 1, 2, 3, 4, OR ?):3
  * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *
  *                                                                 *
  *           Welcome to MESSENGER (APS Text) at USPTO              *
  *                                                                 *
  *                                                                 *
  *    The USPTO production files are current through:              *
  *    30 July 1996 for U.S. Patent Text Data.                      *
  *    30 July 1996 for U.S. Current Classification data.           *
  *    30 July 1996 for U.S. Patent Image Data.                     *
  *                                                                 *
  *       * PLEASE USE 305-9000 FOR NEW TELEPHONE NUMBER *          *
  *                                                                 *
  * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *
  *  DISCLAIMER:                                                    *
  *  Neither the United States Government, nor any agency           *
  *  thereof, nor any of their contractors, subcontractors or       *
  *  employees make any warranty, expressed or implied,             *
  *  including any warranty of marketability of fitness for a       *
  *  particular purpose; nor assumes any legal liability or         *
  *  responsibility for any party's use, or the results of          *
  *  such, of the data.                                             *
  *                                                                 *
  * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *
  *                Help Desk --> 703-305-9000                       *
  *                                                                 *
  *    The Help Desk is staffed for APS support 7 days/week.        *
  *      Monday through Friday:      6:30am - 9:00pm                *
  *      Saturday, Sunday, Holidays: 8:30am - 5:00 pm               *
  *                                                                 *
  *    The Help Desk staff at this number will handle all APS       *
  *    related questions.                                           *
  *                                                                 *
  * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *
  *                                                                 *
  *    >>>>>>>>>>>>> NEW SUNDAY HOURS !!! <<<<<<<<<<<<<             *
  *                                                                 *
  *    The APS is available:                                        *
  *            6:30am - 9:00pm Monday through Friday                *
  *            7:30am - 5:00pm Saturday, Sunday, Holidays           *
  *                                                                 *
  *      APS is unavailable Thanksgiving Day, Christmas Day,        *
  *      and New Year's Day.                                        *
  *                                                                 *
  * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *
FILE 'USPAT' ENTERED AT 10:49:26 ON 05 AUG 96
  * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *
  *              W E L C O M E   T O   T H E                        *
  *         U. S.   P A T E N T   T E X T   F I L E                 *
  * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *
=> s cns
L1         3079 CNS
=> s l1 and precursor(2w)cell?
```

```
         40649 PRECURSOR
        319031 CELL?
           485 PRECURSOR(2W)CELL?
L2          19 L1 AND PRECURSOR(2W)CELL?
=> s l2 and bcl-2
          2511 BCL
       2050491 2

            26 BCL-2
                 (BCL(W)2)
L3           0 L2 AND BCL-2
=> s l2 and cultur?
         41486 CULTUR?
L4          17 L2 AND CULTUR?
=> s l4 and growth(2w)factor?
        113538 GROWTH
        360613 FACTOR?
          5769 GROWTH(2W)FACTOR?
L5           9 L4 AND GROWTH(2W)FACTOR?
=> d l5 1-9 cit,ab
```

1. 5,538,722, Jul. 23, 1996, Isolation, growth, differentiation and genetic engineering of human muscle cells; Helen M. Blau, et al., 424/93.21; 435/69.4, 172.3, 240.2 [IMAGE AVAILABLE]

US PAT NO: 5,538,722 [IMAGE AVAILABLE] L5: 1 of 9

ABSTRACT:
Myoblasts are produced, conveniently in low or serum-free medium, for use in introduction into a mammalian host, particularly a human host, for treatment of diseases of muscle tissue or acting as carriers for genetic capabilities, particularly correcting a genetic defect or for production of a soluble protein, which may serve in a therapy for the mammalian host. Myoblasts introduced into tissue are able to migrate to sites distal from the site of injection, expanding the area of their effect.

2. 5,438,121, Aug. 1, 1995, Brain derived neurotrophic factor; Yves-Alain Barde, et al., 530/399; 435/69.1; 530/350, 387.9, 389.2; 536/23.51 [IMAGE AVAILABLE]

US PAT NO: 5,438,121 [IMAGE AVAILABLE] L5: 2 of 9

ABSTRACT:
The present invention relates to nucleic acid sequences encoding brain derived neurotrophic factor (BDNF), as well as BDNF protein produced in quantity using these nucleic acid sequences, as well as fragments and derivatives thereof. In addition, the invention relates to pharmacologic compositions and therapeutic uses of BDNF, having provided, for the first time, the means to generate sufficient quantities of substantially pure BDNF for clinical use. In a specific embodiment, BDNF may be used to promote the survival of substantia nigra dopaminergic neurons and basal forebrain cholinergic neurons, thereby providing a method for treating, respectively, Parkinson's disease and Alzheimer's disease. The invention also relates to antibodies directed toward BDNF or fragments thereof, having provided a method for generating sufficient immunogen. Further, by permitting a comparison of the nucleic acid sequences of BDNF and NGF, the present invention provides for the identification of homologous

regions of nucleic acid sequence between BDNF and NGF, thereby defining a BDNF/NGF gene family; the invention provides a method for identifying and isolating additional members of this gene family.

3. 5,387,742, Feb. 7, 1995, Transgenic mice displaying the amyloid-forming pathology of alzheimer's disease; Barbara Cordell, 800/2; 435/172.3; 536/23.5 [IMAGE AVAILABLE]

US PAT NO: 5,387,742 [IMAGE AVAILABLE] L5: 3 of 9

ABSTRACT:
Cloned recombinant or synthetic DNA sequences related to the pathology of Alzheimer's disease are injected into fertilized mouse eggs. The injected eggs are implanted in pseudo pregnant females and are grown to term to provide transgenic mice whose cells express proteins related to the pathology of Alzheimer's disease. The injected sequences are constructed having promoter sequences connected so as to express the desired protein in brain tissues of the transgenic mouse. The proteins which are preferably ubiquitously expressed include (1) .beta.-amyloid core precursor proteins; and (2) .beta.-amyloid related precursor proteins; and (3) serine protease inhibitor. The transgenic mice provide useful models for studying compounds being tested for their usefulness in treating Alzheimer's disease, and for studying the in vivo interrelationships of these proteins to each other.

4. 5,387,520, Feb. 7, 1995, Treatment of tumor cells in vitro with neurotrophic factors and cell proliferation inhibitors; Patrizia LoPresti, et al., 435/240.2, 240.1, 243, 244, 245; 514/2, 8, 12; 530/399 [IMAGE AVAILABLE]

US PAT NO: 5,387,520 [IMAGE AVAILABLE] L5: 4 of 9

ABSTRACT:
Disclosed are methods and compositions for treating neuroblastoma cells. The methods include contacting the neuroblastoma cells with a neurotrophic factor and less than a lethal dose of an inhibitor of cell proliferation for about 1 to 15 days, and then maintaining the neuroblastoma cells in contact with the neurotrophic factor for an additional 1 to 15 days. The composition includes a neurotrophic factor such as the neurotropin, nerve **growth** **factor**, and an inhibitor of cell proliferation such as aphidicolin, thymidine, or hydroxyurea. Also disclosed are methods for inducing the remission or differentiation of, or eliminating, neuroblastoma cells.

5. 5,300,436, Apr. 5, 1994, Genetically modified tyrosine hydroxylase and uses thereof; Menek Goldstein, et al., 435/252.3, 190, 320.1; 536/23.2; 935/10, 14 [IMAGE AVAILABLE]

US PAT NO: 5,300,436 [IMAGE AVAILABLE] L5: 5 of 9

ABSTRACT:
Modification of the DNA encoding the enzyme tyrosine hydroxylase (TH) resulting in amino acid substitution in one of the first fifty five N-terminal residues, in particular replacing Ser-40 with Tyr or Leu, produced TH variants having substantially increased enzymatic activity upon transfection of suitable host cells. Cells transfected with the variant TH having enhanced enzymatic activity are useful for treating neurological or psychiatric disorders associated with deficient TH or

dopamine, in particular Parkinson's disease, by grafting such cells into the brain.

6. 5,279,966, Jan. 18, 1994, Cloning, expression and uses of a novel secreted protein, F-spondin; Thomas M. Jessell, et al., 435/320.1, 69.1, 252.3; 530/395, 399; 536/23.5 [IMAGE AVAILABLE]

US PAT NO: 5,279,966 [IMAGE AVAILABLE] L5: 6 of 9

ABSTRACT:
This invention provides an isolated vertebrate nucleic acid molecule encoding F-spondin. This invention also provides a probe comprising a nucleic acid molecule of at least 15 nucleotides capable of specifically hybridizing with a sequence included within the sequence of a nucleic acid molecule encoding a F-spondin. This invention provides a host vector system for the production of a F-spondin. This invention provides purified F-spondin and the uses of compositions containing purified F-spondin. This invention further provides a method of attaching nerve cells to a matrix using purified F-spondin. This invention also provides a method of stimulating nerve cell growth using purified F-spondin. This invention further provides a method of regenerating nerve call using purified F-spondin. Finally, this invention provides a pharmaceutical composition for stimulating nerve cell growth comprising an effective amount of purified F-spondin and a pharmaceutically acceptable carrier.

7. 5,250,414, Oct. 5, 1993, Diagnostic methods using neurite **growth** regulatory **factors**; Martin E. Schwab, et al., 435/7.72, 7.23; 436/64, 813; 514/2, 21; 530/350 [IMAGE AVAILABLE]

US PAT NO: 5,250,414 [IMAGE AVAILABLE] L5: 7 of 9

ABSTRACT:
The proteins of the present invention include central nervous system myelin associated proteins and metalloproteases associated with glioblastoma cells and other malignant tumors which can metastasize to the brain. The **CNS** myelin associated proteins inhibit neurite outgrowth in nerve cells and neuroblastoma cells, and can also inhibit fibroblast spreading. Such inhibitory proteins include a 35,000 dalton and a 250,000 dalton molecular weight protein. The **CNS** myelin associated inhibitory proteins may be used in the treatment of malignant tumors. Antibodies to the **CNS** myelin associated proteins can be used in the diagnosis and therapies of nerve damage. Monoclonal antibody IN-1 may be used to promote regeneration of nerve fibers over long distances in spinal cord lesions. The metalloproteases of the invention have value in diagnosis of malignancies and the treatment of nerve damage and degenerative disorders of the nervous system. Inhibitors of the metalloproteases in combination with the **CNS** myelin associated inhibitory proteins can be used in the treatment of malignant tumors. Methods of determining malignant potential of a cell by measuring metalloprotease activity are provided.

8. 5,229,500, Jul. 20, 1993, Brain derived neurotrophic factor; Yves-Alain Barde, et al., 514/12; 435/69.1; 530/350, 387.9, 389.2, 399, 412, 413 [IMAGE AVAILABLE]

US PAT NO: 5,229,500 [IMAGE AVAILABLE] L5: 8 of 9

ABSTRACT:

The present invention relates to nucleic acid sequences encoding brain derived neurotrophic factor (BDNF), as well as BDNF protein produced in quantity using these nucleic acid sequences, as well as fragments and derivatives thereof. In addition, the invention relates to pharmacologic compositions and therapeutic uses of BDNF, having provided, for the first time, the means to generate sufficient quantities of substantially pure BDNF for clinical use. In a specific embodiment, BDNF may be used to promote the survival of substantia nigra dopaminergic neurons and basal forebrain cholinergic neurons, thereby providing a method for treating, respectively, Parkinson's disease and Alzheimer's disease. The invention also relates to antibodies directed toward BDNF or fragments thereof, having provided a method for generating sufficient immunogen. Further, by permitting a comparison of the nucleic acid sequences of BDNF and NGF, the present invention provides for the identification of homologous regions of nucleic acid sequence between BDNF and NGF, thereby defining a BDNF/NGF gene family; the invention provides a method for identifying and isolating additional members of this gene family.

9. 5,212,082, May 18, 1993, Genetically modified tyrosine hydroxylase and uses thereof; Menek Goldstein, et al., 435/190, 172.1; 935/14 [IMAGE AVAILABLE]

US PAT NO: 5,212,082 [IMAGE AVAILABLE] L5: 9 of 9

ABSTRACT:
Modification of the DNA encoding the enzyme tyrosine hydroxylase (TH) resulting in amino acid substitution in one of the first fifty five N-terminal residues, in particular replacing Ser-40 with Tyr or Leu, produced TH variants having substantially increased enzymatic activity upon transfection of suitable host cells. Cells transfected with the variant TH having enhanced enzymatic activity are useful for treating neurological or psychiatric disorders associated with deficient TH or dopamine, in particular Parkinson's disease, by grafting such cells into the brain.
=> d l5 1 leg

US PAT NO: 5,538,722 [IMAGE AVAILABLE] L5: 1 of 9
DATE ISSUED: Jul. 23, 1996
TITLE: Isolation, growth, differentiation and genetic engineering of human muscle cells
INVENTOR: Helen M. Blau, Menlo Park, CA
Simon M. Hughes, Palo Alto, CA
ASSIGNEE: Stanford University, Stanford, CA (U.S. corp.)
APPL-NO: 07/748,348
DATE FILED: Aug. 22, 1991
ART-UNIT: 184
PRIM-EXMR: Jacqueline M. Stone
LEGAL-REP: Bertram I. Rowland
=> logoff

149508

```
       1803654 IN
         59282 SITU

L1        2412 IN(W)SITU
=> s l1 and cns
          2788 CNS
L2          17 L1 AND CNS
=> s l2 and egf
           799 EGF
L3           4 L2 AND EGF
=> d l3 1-4 cit,ab
```

1. 5,348,729, Sep. 20, 1994, Evaluative means for detecting inflammatory reactivity; Esther M. Sternberg, et al., 514/179; 206/569; 424/85.1, 85.2, 85.4, 85.5, 85.6, 85.7; 435/7.92, 975; 436/2, 518, 536; 514/282, 648, 805, 825, 885, 886 [IMAGE AVAILABLE]

US PAT NO: 5,348,729 [IMAGE AVAILABLE] L3: 1 of 4

ABSTRACT:
The present invention is directed to a method for testing the susceptibility of a mammal to inflammatory diseases which comprises the steps of:

administering to a mammal a compound selected from the group consisting of Type i mineralocorticoid receptor antagonists, opiate antagonists, estrogen antagonists or mixed estrogen agonists/antagonists, progesterone agonists; or a combination of an estrogen antagonist with one or a combination of a Type I glucocorticoid receptor antagonist, a Type II glucocorticoid agonist or a progesterone agonist which is effective in stimulating the hypothalamic-pituitary-adrenal (HPA) axis; and

measuring the level of at least one hormone secreted by the hypothalamus, pituitary or adrenal glands of said mammal.

The present invention is also directed to methods of treating inflammatory diseases.

2. 5,279,966, Jan. 18, 1994, Cloning, expression and uses of a novel secreted protein, F-spondin; Thomas M. Jessell, et al., 435/320.1, 69.1, 252.3; 530/395, 399; 536/23.5 [IMAGE AVAILABLE]

US PAT NO: 5,279,966 [IMAGE AVAILABLE] L3: 2 of 4

ABSTRACT:
This invention provides an isolated vertebrate nucleic acid molecule encoding F-spondin. This invention also provides a probe comprising a nucleic acid molecule of at least 15 nucleotides capable of specifically hybridizing with a sequence included within the sequence of a nucleic acid molecule encoding a F-spondin. This invention provides a host vector system for the production of a F-spondin. This invention provides purified F-spondin and the uses of compositions containing purified F-spondin. This invention further provides a method of attaching nerve cells to a matrix using purified F-spondin. This invention also provides a method of stimulating nerve cell growth using purified F-spondin. This

purified F-spondin. Finally, this invention provides a pharmaceutical composition for stimulating nerve cell growth comprising an effective

amount of purified F-spondin and a pharmaceutically acceptable carrier.

3. 5,209,920, May 11, 1993, Evaluative means for detecting inflammatory reactivity; Esther M. Sternberg, et al., 435/7.92; 206/569; 424/85.1, 85.2, 85.4, 85.5, 85.6, 85.7; 435/975; 436/2, 506; 514/805, 825, 885, 886, 889 [IMAGE AVAILABLE]

US PAT NO: 5,209,920 [IMAGE AVAILABLE] L3: 3 of 4

ABSTRACT:
Inbred Lewis (LEW/N) female rats develop an arthritis in response to Group A streptococcal cell wall peptidoglycanpolysaccharide (SCW) which mimics human rheumatoid arthritis. Histocompatible Fischer (F344/N) rats, on the other hand, do not develop arthritis in response to the same SCW stimulus. To evaluate this difference in inflammatory reactivity between the two strains, the function of the hypothalamic-pituitary-adrenal axis and its ability to modulate the development of the inflammatory response was studied. It has been found that, in contrast to F344/N rats, LEW/N rats had markedly impaired plasma ACTH and corticosterone responses to SCW, recombinant human Interleukin-1 alpha (IL-1 alpha), the serotonin agonist, quipazine, and synthetic rat corticotropin-releasing hormone (CRH). In addition, LEW/N rats compared to F344/N rats had smaller adrenal glands and larger thymuses. Treatment of LEW/N rats with replacement doses of dexamethasone decreased the severity of their SCW-induced arthritis. Conversely, treatment of F344/N rats with the glucocorticoid receptor antagonist, RU 486, or the serotonin (5-HT.sub.2) antagonist, LY53857, was associated with development of severe inflammatory disease, including arthritis, in response to SCW. These findings support the concept that susceptibility of LEW/N rats to SCW arthritis is related to abnormal hypothalamic-pituitary-adrenal (HPA) axis responsiveness to inflammatory and other stress mediators and that resistance of F344/N rats to SCW arthritis is regulated by an intact HPA axis-immune system feedback loop.

4. 5,006,330, Apr. 9, 1991, Evaluative means for detecting inflammatory reactivity; Esther M. Sternberg, et al., 436/506; 514/2, 21, 825 [IMAGE AVAILABLE]

US PAT NO: 5,006,330 [IMAGE AVAILABLE] L3: 4 of 4

ABSTRACT:
Inbred Lewis (LEW/N) female rats develop an arthritis in response to Group A streptococcal cell wall peptidoglycanpolysaccharide (SCW) which mimics human rheumatoid arthritis. Histocompatible Fischer (F344/N) rats, on the other hand, do not develop arthritis in response to the same SCW stimulus. To evaluate this difference in inflammatory reactivity between the two strains, the function of the hypothalamic-pituitary-adrenal axis and its ability to modulate the development of the inflammatory response was studied. It has been found that, in contrast to F344/N rats, LEW/N rats had markedly impaired plasma ACTH and corticosterone responses to SCW, recombinant human Interleukin-1 alpha (IL-1 alpha), the serotonin agonist, quipazine, and synthetic rat corticotropin-releasing hormone (CRH). In addition, LEW/N rats compared to F344/N rats had smaller

replacement doses of dexamethasone decreased the severity of their SCW-induced arthritis. Conversely, treatment of F344/N rats with the glucocorticoid receptor antagonist, RU 486, or the serotonin (5-HT.sub.2) antagonist, LY53857, was associated with development of severe inflammatory disease, including arthritis, in response to SCW. These findings support the concept that susceptibility of LEW/N rats to SCW arthritis is related to abnormal hypothalamic-pituitary-adrenal (HPA) axis responsiveness to inflammatory and other stress mediators and that resistance of F344/N rats to SCW arthritis is regulated by an intact HPA axis-immune system feedback loop.

```
=> e weiss, samuel/in
E1            6     WEISS, RUDOLF/IN
E2            2     WEISS, SAM/IN
E3            2 --> WEISS, SAMUEL/IN
E4            1     WEISS, SAMUEL HERMAN/IN
E5            1     WEISS, SAMUEL M/IN
E6            1     WEISS, SCOTT A/IN
E7            1     WEISS, SHELDON M/IN
E8            1     WEISS, SHERMAN L/IN
E9            2     WEISS, SHIMON/IN
E10           1     WEISS, SHIRLEY I/IN
E11           1     WEISS, SHIRLEY I DECEASED/IN
E12           4     WEISS, SIDNEY/IN
=> s e3,e4,e5,e2
              2 "WEISS, SAMUEL"/IN
              1 "WEISS, SAMUEL HERMAN"/IN
              1 "WEISS, SAMUEL M"/IN
              2 "WEISS, SAM"/IN
L4            6 ("WEISS, SAMUEL"/IN OR "WEISS, SAMUEL HERMAN"/IN OR "WEISS,
 SA
                MUEL M"/IN OR "WEISS, SAM"/IN)
=> d l4 1-6 cit

1.  D 287,909, Jan. 27, 1987, Recreational lounge; **Samuel M. Weiss**,
D6/329, 360, 382, 386; D21/235 [IMAGE AVAILABLE]

2.  D 270,726, Sep. 27, 1983, Miniature telephone enclosure; **Samuel
Weiss**, D14/143; D25/16 [IMAGE AVAILABLE]

3.  4,381,288, Apr. 26, 1983, Mercury brine sludge treatment; **Samuel
Weiss**, et al., 423/101; 210/901; 423/109 [IMAGE AVAILABLE]

4.  4,069,997, Jan. 24, 1978, Waste receptacle cam lock with locking
projection; **Sam Weiss**, 248/553, 313, 907; 292/67 [IMAGE AVAILABLE]

5.  3,803,738, Apr. 16, 1974, ADVERTISING FRAME FOR USE ON A WASTE
RECEPTACLE; **Sam Weiss**, 40/306, 611; 220/210, 334; D34/1 [IMAGE
AVAILABLE]

6.  3,769,920, Nov. 6, 1973, FOLDING TABLE LEG LOCKING DEVICE; **Samuel
Herman Weiss**, 108/133 [IMAGE AVAILABLE]
=> e reynolds, brent/in
E1            1     REYNOLDS, BLAKE W/IN
E2            1     REYNOLDS, BRADLEY D/IN
E3            0 --> REYNOLDS, BRENT/IN
```

```
E5            1     REYNOLDS, BRIAN C/IN
E6            2     REYNOLDS, BRIAN E/IN

E7            1     REYNOLDS, BRIAN L/IN
E8            2     REYNOLDS, BRIAN R/IN
E9            5     REYNOLDS, BRUCE A/IN
E10           4     REYNOLDS, BRUCE C/IN
E11           8     REYNOLDS, BRUCE E/IN
E12           1     REYNOLDS, BRUCE R/IN
=> e van der kooy, derek/in
E1            3     VAN DER KOOIJ, TIJMEN/IN
E2            1     VAN DER KOOIJ, WILLEM P/IN
E3            0 --> VAN DER KOOY, DEREK/IN
E4            1     VAN DER KOOY, IJEDE/IN
E5            1     VAN DER KOOY, W M/IN
E6            3     VAN DER KOP, JOANNES A E/IN
E7            1     VAN DER KORT, JACOBUS J C/IN
E8            1     VAN DER KRAAN, PETRUS CORNELIS/IN
E9            1     VAN DER KROFT, THEODORUS CORNELIS MARIE/IN
E10           7     VAN DER KRUIJS, FRANCISCUS N G R/IN
E11           1     VAN DER KRUIK, JOHN/IN
E12           1     VAN DER KRUIK, JOHN P/IN
=> e morshead, cindi/in
E1            1     MORSEY, DONALD M/IN
E2            2     MORSHAUSER, FRED S/IN
E3            0 --> MORSHEAD, CINDI/IN
E4            1     MORSHEDI, ABDOL M/IN
E5            4     MORSI, BADIE/IN
E6            1     MORSIANI, CARLO/IN
E7            1     MORSILLI, FRANK PETER/IN
E8            4     MORSING, GIJSBERTUS B/IN
E9            1     MORSING, LARS JOHAN GUSTAF/IN
E10           2     MORSING, PER/IN
E11           2     MORSINK, LUCAS/IN
E12           1     MORSKI, DANIEL/IN
=> e craigm constance/in
E1            1     CRAIGIE, WILLIAM A/IN
E2            6     CRAIGLOW, ROBERT L/IN
E3            0 --> CRAIGM CONSTANCE/IN
E4            1     CRAIGMILE, JOSEPH M/IN
E5            2     CRAIK, DARREL W/IN
E6            1     CRAIK, JAMES D/IN
E7            1     CRAIL, GORDON C/IN
E8            1     CRAIL, IAN ROBERT HENRY/IN
E9            5     CRAIL, TIMOTHY A/IN
E10           5     CRAIN, ALLEN L/IN
E11           7     CRAIN, ARTHUR/IN
E12           1     CRAIN, AUTHER LEE/IN
=> e craig, constance/in
E1            1     CRAIG, COBA C JR/IN
E2            1     CRAIG, COLLIN/IN
E3            0 --> CRAIG, CONSTANCE/IN
E4            1     CRAIG, DALE E/IN
E5            1     CRAIG, DANA W/IN
E6            1     CRAIG, DANIEL E/IN
E7           10     CRAIG, DANIEL H/IN
E8            2     CRAIG, DANIEL L/IN
```

E9 1 CRAIG, DAVID/IN
E10 2 CRAIG, DAVI[redacted]/IN

E11 2 CRAIG, DAVID O/IN
E12 1 CRAIG, DAVID P/IN
=> log y
U.S. Patent & Trademark Office LOGOFF AT 11:02:26 ON 03 NOV 95
+++
OK
ATZ
ATZ
OK
ATH
ATH
Ok

Processing
Processing
Processing
Processing
Processing
Processing
Processing
Processing
Processing
Processing
Processing
Processing
Processing
Processing
Processing
>>>I/O error in file 399
?s s2 and (precursor or progenitor)

```
            154  S2
         206344  PRECURSOR
          43325  PROGENITOR
      S3      6  S2 AND (PRECURSOR OR PROGENITOR)
```
?rd s3

...completed examining records
```
      S4      6  RD S3 (unique items)
```
?t s4/6/1-6

4/6/1 (Item 1 from file: 5)
11843074 BIOSIS Number: 98443074
Age- and TGF-alpha-dependent effects on neural stem and progenitor cells in the adult mammalian forebrain subependyma
Print Number: Biological Abstracts/RRM Vol. 047 Iss. 010 Ref. 174829

4/6/2 (Item 1 from file: 144)
12085318 PASCAL No.: 95-0288649
A comparison of the effects of methotrexate and misonidazole on the germinal cells of the subependymal plate of the rat

4/6/3 (Item 2 from file: 144)
11823357 PASCAL No.: 94-0707634
Divergent lineages for oligodendrocytes and astrocytes originating in the neonatal forebrain subventricular zone

4/6/4 (Item 3 from file: 144)
10956118 PASCAL No.: 93-04[redacted]482
Proliferating subventricular zone cells in the adult mammalian forebrain can differentiate into neurons and glia

4/6/5 (Item 1 from file: [illegible])

04995979 83228979
Dividing and newly produced cells in the corpus callosum of adult mouse cerebrum as detected by light microscopic radioautography.

4/6/6 (Item 1 from file: 434)
11160346 Genuine Article#: GL953 Number of References: 31
Title: DEVELOPMENTAL EXPRESSION OF ALPHA-1-ANTICHYMOTRYPSIN IN BRAIN MAY BE RELATED TO ASTROGLIOSIS (Abstract Available)
?t s6/7/1-6

>>>Set 6 does not exist
?t s4/7/1-6

4/7/1 (Item 1 from file: 5)
DIALOG(R)File 5:BIOSIS PREVIEWS(R)

11843074 BIOSIS Number: 98443074
Age- and TGF-alpha-dependent effects on neural stem and progenitor cells in the adult mammalian forebrain subependyma
Tropepe V; Craig C G; Morshead C M; Van Der Kooy D
Neurobiol. Res. Group, Dep. Anat. Cell Biol., Univ. Toronto, Toronto, ON M5S 1A8, Canada
Society for Neuroscience Abstracts 21 (1-3). 1995. 528.
Full Journal Title: 25th Annual Meeting of the Society for Neuroscience, San Diego, California, USA, November 11-16, 1995. Society for Neuroscience Abstracts
ISSN: 0190-5295
Language: ENGLISH
Print Number: Biological Abstracts/RRM Vol. 047 Iss. 010 Ref. 174829

4/7/2 (Item 1 from file: 144)
DIALOG(R)File 144:Pascal

12085318 PASCAL No.: 95-0288649
A comparison of the effects of methotrexate and misonidazole on the germinal cells of the subependymal plate of the rat
MORRIS G M; HOPEWELL J W; MORRIS A D
Univ. Oxford, Churchill hosp., CRC normal tissue radiobiology res. group, Oxford, United Kingdom
Journal: British journal of radiology, 1995, 68 (808) 406-412
ISSN: 0007-1285 CODEN: BJRAAP Availability: INIST-103; 354000056084850120
No. of Refs.: 32 ref.
Document Type: P (Serial) ; A (Analytic)
Country of Publication: United Kingdom
Language: English
The cytotoxic effects of the drugs methotrexate (MTX) and misonidazole have been assessed in the rat brain by quantifying changes in the

constituent cell populations of a glial cell progenitor layer, the subependymal plate (SEP). Three distinct cell types can be identified in the SEP on the basis of their nuclear morphology: cells with small dark (SD), small light (SL) or large light (LL) nuclei. The cells with SD nuclei may represent pluripotential glial cell precursors. A reduction in the total nuclear density of the SEP, after the local ventricular administration of MTX, could be accounted for largely by a loss of cells with SD nuclei; to similar 45% of control values 2 days after MTX followed by a full recovery in numbers by day 5. A further decline in the number of cells with SD nuclei occurred at 12 weeks after MTX administration. The pattern of changes in the cellularity of the SEP, after misonidazole administration, were similar to those observed after MTX treatment, although the magnitude of the response was reduced. It was concluded that both drugs, but MTX in particular, could have a potential additive effect on glial progenitor cells when used in combination with other forms of cancer therapy including radiation

4/7/3 (Item 2 from file: 144)
DIALOG(R)File 144:Pascal

11823357 PASCAL No.: 94-0707634
Divergent lineages for oligodendrocytes and astrocytes originating in the neonatal forebrain subventricular zone
LUSKIN M B; MCDERMOTT K
Emory univ. school medicine, dep. anatomy cell biology, Atlanta GA 30322, USA
Journal: Glia : (New York, NY), 1994, 11 (3) 211-226
ISSN: 0894-1491 Availability: INIST-21570; 354000046970590010
No. of Refs.: 49 ref.
Document Type: P (Serial) ; A (Analytic)
Country of Publication: USA
Language: English

4/7/4 (Item 3 from file: 144)
DIALOG(R)File 144:Pascal

10956118 PASCAL No.: 93-0465482
Proliferating subventricular zone cells in the adult mammalian forebrain can differentiate into neurons and glia
LOIS C; ALVAREZ-BUYLLA A
Rockefeller univ., New York NY 10021, USA
Journal: Proceedings of the National Academy of Sciences of the United States of America, 1993, 90 (5) 2074-2077
ISSN: 0027-8424 CODEN: PNASA6 Availability: INIST-574; 354000036728140920
No. of Refs.: 25 ref.
Document Type: P (Serial) ; A (Analytic)
Country of Publication: USA
Language: English
Subventricular zone (SVZ) cells proliferate spontaneously in vivo in the telencephalon of adult mamma[redacted]. Several studies suggest that [redacted] cells do not differentiate after mitosis into neurons or glia but die. In the

with (SUP 3 H)thymidine differentiate directly into neurons and glia in explant cultures. In vitro labeling with (SUP 3 H)thymidine shows that 98%

of the neurons that differentiate from the SVZ explants are derived from precursor cells that underwent their last division in vivo

4/7/5 (Item 1 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

04995979 83228979
Dividing and newly produced cells in the corpus callosum of adult mouse cerebrum as detected by light microscopic radioautography.
Paterson JA
Anat Anz (GERMANY, EAST) 1983, 153 (2) p149-68, ISSN 0003-2786
Journal Code: 4PE
Languages: ENGLISH
Document type: JOURNAL ARTICLE
New cell production in the corpus callosum and subependyma of 4 month old mice was analysed by light microscopic radioautography after 3H-thymidine injections. In the subependymal region of the lateral ventricle, about 10% of cells were labeled in mice examined 2 h after 3H-thymidine, and 40 to 50% of cells were labeled after 7 d of isotope infusion. In corpus callosum of mice 2 h after precursor injection, the few cells (0.1 to 0.2%) that were labeled had the appearance of "immature cells", and were presumably incompletely-differentiated neuroglial precursor cells which were preparing to divide. After 7 d of continuous 3H-thymidine administration, more labeled neuroglia (about 2%) were detected in corpus callosum; these newlyproduced cells included several astrocytes and some oligodendrocytes, as well as immature cells. Since the immature cells were the most frequently observed type of dividing cell within the normal adult corpus callosum, it is probable that the new astrocytes and oligodendrocytes were the products of divisions of their respective precursor cells.

4/7/6 (Item 1 from file: 434)
DIALOG(R)File 434:SciSearch(R)

11160346 Genuine Article#: GL953 Number of References: 31
Title: DEVELOPMENTAL EXPRESSION OF ALPHA-1-ANTICHYMOTRYPSIN IN BRAIN MAY BE RELATED TO ASTROGLIOSIS
Author(s): KOO EH; ABRAHAM CR; POTTER H; CORK LC; PRICE DL
Corporate Source: BRIGHAM & WOMENS HOSP,CTR NEUROL DIS,114 LMRC,75 FRANCIS ST/BOSTON//MA/02115; JOHNS HOPKINS UNIV,SCH MED,DEPT PATHOL/BALTIMORE//MD/21205; JOHNS HOPKINS UNIV,SCH MED,DEPT NEUROL/BALTIMORE//MD/21205; JOHNS HOPKINS UNIV,SCH MED,DEPT NEUROSCI/BALTIMORE//MD/21205; JOHNS HOPKINS UNIV,SCH MED,DIV COMPARAT MED/BALTIMORE//MD/21205; JOHNS HOPKINS UNIV,SCH MED,NEUROPATHOL LAB/BALTIMORE//MD/21205; BOSTON UNIV,SCH MED,CTR ARTHRITIS/BOSTON//MA/02118; HARVARD UNIV,SCH MED,DEPT NEUROBIOL/BOSTON//MA/02115
Journal: NEUROBIOLOGY OF AGING, 1991, V12, N5, P495-501
Language: ENGLISH Document Type: ARTICLE
Abstract: In the brains of individuals with Alzheimer's disease (AD) and aged monkeys, the serine protease inhibitor alpha-1-antichymotrypsin

(ACT) is selectively associated with deposits of amyloid found in senile plaques and in the walls of blood vessels. The origin of ACT in

the brains of these aged subjects is unclear. In this study, ribonucleic acid (RNA) blots of human brains show that ACT messenger RNA (mRNA) increases during development. Levels of mRNA were negligible in fetuses and young adults but were increased slightly in normal aged individuals and highest in individuals with AD. In situ hybridization detected ACT transcripts in astrocytes of the cortex, subependymal region, and superficial white matter. The expression of ACT mRNA was highest in subjects with AD, in an adult with Down's syndrome, in an individual with Pick's disease, and in cases of Huntington's disease. In the brains of adult monkeys, ACT expression was detected primarily in astrocytes of the subependyma and white matter. Thus the presence of ACT appears to be related to the response of astrocytes to the brain abnormalities seen in these conditions.

```
?e au-van der kooy, derek


Ref    Items  Index-term
E1         1  AU-TYPE
E2         2  AU-V
E3         0 *AU-VAN DER KOOY, DEREK
E4         1  AU-VERTICAL-BAR-YSZ-VERTICAL-BAR-AG
E5         1  AU-VF6
E6         1  AU-V2O5
E7         7  AU-W
E8         1  AU-W-GAAS
E9         6  AU-WO3
E10        1  AU-WSIN
E11        1  AU-WTI-PD
E12        1  AU-W18049

          Enter P or PAGE for more
?e au=van der kooy, derek


Ref    Items  Index-term
E1        82  AU=VAN DER KOOY, D.
E2         2  AU=VAN DER KOOY, D.*
E3        44 *AU=VAN DER KOOY, DEREK
E4         1  AU=VAN DER KOOY, DICK
E5         9  AU=VAN DER KOOY, K.
E6         1  AU=VAN DER KOOY, KARIN
E7         4  AU=VAN DER KOOY,D.
E8         3  AU=VAN DER KOP D
E9         3  AU=VAN DER KOP D A M
E10        2  AU=VAN DER KOP, D.
E11        2  AU=VAN DER KOP, D. A. M.
E12        1  AU=VAN DER KOP, DIANNE

          Enter P or PAGE for more
?s e1-e3

              82  AU=VAN DER K[redacted], D.
               2  AU=VAN DER KOOY, D.*
              44  AU=VAN DER KOOY, DEREK
```

```
      S5     128  E1-E3
?rd s5

...examined 50 records  (50)
...examined 50 records  (100)
...completed examining records
      S6      94  RD S5 (unique items)
?s s6 and cns

            94  S6
         90927  CNS
      S7     1  S6 AND CNS
?t s7/7/1


 7/7/1     (Item 1 from file: 76)
DIALOG(R)File  76:Life Sciences Collection
(c) 1995 Cambridge Sci Abs. All rts. reserv.

0908355  82000869544
  Aversive stimulus properties of peripherally injected arginine
vasopressin.
  Presented at: 2. International Symposium on Drugs as Discriminative
Stimuli, Beerse (Belgium), 30 Jun-3 Jul 1982
  Dantzer, R.; Bluthe, R.M.; Tazi, A.; Mormede, P.; Ettenberg, A.; van der
Kooy, D.; Koob, G.F.; Le Moal, M.
  Lab. Neurobiol. Comportements I.N.R.A., Univ. Bordeaux II, 146 Rue Leo
Saignat, 33076 Bordeaux Cedex, France
  JANSSEN RES. FOUND. SER.; 6
  Publ: Publ by: ELSEVIER/NORTH-HOLLAND BIOMEDICAL PRESS, AMSTERDAM
(NETHERLANDS), 1982, pp. 305-314  1982
  In DRUG DISCRIMINATION: APPLICATIONS IN CNS PHARMACOLOGY.. Colpaert,
F.C.; Slangen, J.L. (eds.)
  Language: English
  Document Type: Book-chapter article
  Subfile: 11  Neurosciences Abstracts; 25  Animal Behaviour Abstracts
  The experiments described in the present article clearly indicate that
arginine vasopressin (AVP) is able to induce a conditioned taste aversion
at behaviorally active doses. The failure of electric shock to potentiate
the conditioned aversive effects of AVP suggest a unique aspect to the
interoceptive signals elicited by AVP. Further studies will be required to
elucidate what these signals are, and how they relate to those produced by
the shock itself.
?s s6 and precursor

            94  S6
        206344  PRECURSOR
      S8     1  S6 AND PRECURSOR
?s s6 and progeitoror

            94  S6
             0  PROGEITOR
      S9     0  S6 AND PROGEITOR
?s s6 and progenitor
```

```
        43325  PROGENITOR
S10         0  S6 AND PROGENITOR
```

```
?t s8/6/1


 8/6/1     (Item 1 from file: 76)
1912414  82003556917
  Clonal heterogeneity in the germinal zone of the developing rat
telencephalon
?t s8/7/1


 8/7/1     (Item 1 from file: 76)
DIALOG(R)File  76:Life Sciences Collection
(c) 1995 Cambridge Sci Abs. All rts. reserv.

1912414  82003556917
  Clonal heterogeneity in the germinal zone of the developing rat
telencephalon
  Acklin, S.E.; Van der Kooy, D.
  Neurobiol. Res. Group, Dep. Anat. and Cell Biol., Univ. Toronto, Med.
Sci. Build., Rm 1105, Toronto, ON M5S 1A8, Canada
  DEVELOPMENT; 118(1), pp. 175-192 1993
  Language: English    Summary Language: English
  Document Type: Journal article
  Subfile: 11  Neurosciences Abstracts
  A double-labeling technique, combining retroviral tagging of individual
cell lines (one clone per brain hemisphere) with the simultaneous [
super(3)H]thymidine-labeling of dividing cells in S phase, was used to
study proliferation characteristics of individual precursor cell lines in
the germinal zone of the developing rat forebrain. The cortical germinal
zone was found to be segregated into three spatially distinct horizontal
populations of precursor cell lineages, which differed in cell cycle
kinetics, amount of cell death, and synchronous versus asynchronous mode of
proliferation. The results demonstrate the clonal heterogeneity among
precursor populations in the telencephalon and the differential spatial
organization of the cortical and the striatal germinal zones.
?e au=morshead, cindi


Ref    Items  Index-term
E1         3  AU=MORSHEAD H
E2         3  AU=MORSHEAD, C.M.
E3         0 *AU=MORSHEAD, CINDI
E4         1  AU=MORSHEAD, CINDI M.
E5         4  AU=MORSHEAD, D.
E6         3  AU=MORSHED A
E7         5  AU=MORSHED A A
E8         1  AU=MORSHED A S
E9         6  AU=MORSHED AA
E10        1  AU=MORSHED AH
E11        2  AU=MORSHED G
E12        5  AU=MORSHED G A

           Enter P or PAGE for more
```

?s e2,e3,e4

3 AU=MORSHEAD, C M.

0 AU=MORSHEAD, CINDI
1 AU=MORSHEAD, CINDI M.
S11 4 E2,E3,E4
?rd s11

...completed examining records
S12 3 RD S11 (unique items)
?t s12/7/1-3

12/7/1 (Item 1 from file: 76)
DIALOG(R)File 76:Life Sciences Collection

2012785 82003692365
Neural stem cells in the adult mammalian forebrain: A relatively quiescent subpopulation of subependymal cells
Morshead, C.M.; Reynolds, B.A.; Craig, C.G.; McBurney, M.W.; Staines, W.A.; Morassutti, D.; Weiss, S.; Van der Kooy, D.
Univ. Toronto, Neurobiol. Res. Group, Dep. Anat. and Cell Biol., Toronto, ON M5S 1A8, Canada
NEURON; 13(5), pp. 1071-1082 1994
Language: English Summary Language: English
Document Type: Journal article
Subfile: 11 Neurosciences Abstracts
Dissection of the subependyma from the lateral ventricle of the adult mouse forebrain is necessary and sufficient for the in vitro formation of clonally derived spheres of cells that exhibit stem cell properties such as self-maintenance and the generation of a large number of progeny comprising the major cell types found in the central nervous system. Killing the constitutively proliferating cells of the subependyma in vivo has no effect on the number of stem cells isolated in vitro and induces a complete repopulation of the subependyma in vivo by relatively quiescent stem cells found within the subependyma. Depleting the relatively quiescent cell population within the subependyma in vivo results in a corresponding decrease in spheres formed in vitro and in the final number of constitutively proliferating cells in vivo, suggesting that a relatively quiescent subependymal cell is the in vivo source of neural stem cells.

12/7/2 (Item 2 from file: 76)
DIALOG(R)File 76:Life Sciences Collection

1940204 82003593112
Satellite cell proliferation in the adult rat trigeminal ganglion results from the release of a mitogenic protein from explanted sensory neurons
Wen, J.Y.M.; Morshead, C.M.; van der Kooy, D.
Neurobiol. Res. Group, Dep. Anat. and Cell Biol., Univ. Toronto, Toronto, ON M5S 1A8, Canada
J. CELL BIOL.; 124(6), pp. 1005-1015 1994
Language: English Summary Language: English
Document Type: Journal article
Subfile: 11 Neurosciences Abstracts

Explant of trigeminal ganglia neurons in adult rats induces perineuronal glial proliferation of primarily satellite cells as opposed to Schwann cells. This proliferation begins at 15 h after explant culture and by 27 h there is a significant increase in glial proliferation as measured by scintillation counts of [super(3)H]thymidine. Blocking protein synthesis between 9 and 3.5 h after explant culture (early) results in an enhanced proliferative response, while blocking protein synthesis between 3.5 and 7 h (late) causes a complete block of the proliferative response assessed at 27 h. Conditioned media experiments demonstrate that both the mitogenic and inhibitory signals are diffusible and heat labile. Finally, the addition of neurotrophic factors to rescue injured ganglionic neurons attenuates the proliferative glial response suggesting that injured neurons produce and release signals that induce glial proliferation.

12/7/3 (Item 3 from file: 76)
DIALOG(R)File 76:Life Sciences Collection

1674597 82002656885
Postmitotic death is the fate of constitutively proliferating cells in the subependymal layer of the adult mouse brain.
Morshead, C.M.; van der Kooy, D.
Neurobiol. Res. Group, Dep. Anat., Univ. Toronto, Toronto, Ont. M5S 1A8, Canada
J. NEUROSCI.; 12(1), pp. 249-256 1992
Language: English Summary Language: English
Document Type: Journal article-original research
Subfile: 11 Neurosciences Abstracts
We examined the proliferation kinetics and fates of the mitotically active cells in the subependyma of the adult mouse. The medial edge, the lateral edge, and the dorsolateral corner of the subependymal layer of the rostral portion of the lateral ventricle each contained mitotically active cells, but the dorsolateral region had the highest percentage of bromodeoxyuridine (BrdU)-labeled cells per unit area. To examine the fate of these proliferating cells, we injected low concentrations of a replication-deficient, recombinant retrovirus directly into the lateral ventricles of adult mice for uptake by mitotically active subependymal cells. Regardless of the survival time postinjection (10 hr, 1 d, 2 d, or 8 d), the number of retrovirally labeled cells per clone remained the same (1 or 2 cells/clone). This suggests that one of the progeny from each cell division dies.
?e au=craig, constance

Ref	Items	Index-term
E1	1	AU=CRAIG, CHERYL A.
E2	1	AU=CRAIG, CLAY HAFER
E3	0	*AU=CRAIG, CONSTANCE
E4	7	AU=CRAIG, CONSTANCE G.
E5	1	AU=CRAIG, CONSTANCE GRACE
E6	1	AU=CRAIG, CYMERMAN
E7	50	AU=CRAIG, D.
E8	40	AU=CRAIG, D. A.
E9	2	AU=CRAIG, D. B.
E10	22	AU=CRAIG, D. C.

```
E11        1  AU=CRAIG, D. E.
E12        5  AU=CRAIG, D. F.

          Enter P or PAGE for more
?s e4,e5

               7  AU=CRAIG, CONSTANCE G.
               1  AU=CRAIG, CONSTANCE GRACE
     S13       8  E4,E5
?rd s13

...completed examining records
     S14       8  RD S13 (unique items)
?t s14/6/1-8


 14/6/1     (Item 1 from file: 399)
DIALOG(R)File 399:(c) 1995 American Chemical Society. All rts. reserv.

  Is cyclic AMP involved in excitatory amino acid-evoked adenosine release
from rat cortical slices?


 14/6/2     (Item 2 from file: 399)
DIALOG(R)File 399:(c) 1995 American Chemical Society. All rts. reserv.

  Mechanism and function of excitatory amino acid-evoked adenosine release
from rat parietal cortex


 14/6/3     (Item 3 from file: 399)
DIALOG(R)File 399:(c) 1995 American Chemical Society. All rts. reserv.

  NMDA-evoked adenosine release from rat cortex does not require the
intermediate formation of nitric oxide


 14/6/4     (Item 4 from file: 399)
DIALOG(R)File 399:(c) 1995 American Chemical Society. All rts. reserv.

  Extracellular adenosine, formed during low level NMDA receptor
activation, provides an inhibitory threshold against further NMDA
receptor-mediated neurotransmission in the cortex


 14/6/5     (Item 5 from file: 399)
DIALOG(R)File 399:(c) 1995 American Chemical Society. All rts. reserv.

  N-Methyl-D-aspartate- and non-N-methyl-D-aspartate-evoked adenosine
release from rat cortical slices: Distinct purinergic sources and
mechanisms of release


 14/6/6     (Item 6 from file: 399)
DIALOG(R)File 399:(c) 1995 American Chemical Society. All rts. reserv.
```

Low-level N-methyl-D-asoartate receptor activation provides a purinergic inhibitory thresnold against further N-methyl-D-aspartate-mediated

neurotransmission in the cortex

14/6/7 (Item 7 from file: 399)
DIALOG(R)File 399:(c) 1995 American Chemical Society. All rts. reserv.

Endogenous glycine modulates N-methyl-D-aspartate-evoked release of adenosine and (3H)noradrenaline from rat cortical slices

14/6/8 (Item 8 from file: 399)
DIALOG(R)File 399:(c) 1995 American Chemical Society. All rts. reserv.

A comparison of N-methyl-D-aspartate-evoked release of adenosine and (3H)norepinephrine from rat cortical slices

?s s2 and cns(3w)ventricle

```
            154  S2
          90927  CNS
         147575  VENTRICLE
             10  CNS(3W)VENTRICLE
     S15      0  S2 AND CNS(3W)VENTRICLE
?s growth(w)factor?

Processing
Processing
Processing
        2539598  GROWTH
        3482078  FACTOR?
     S16 349753  GROWTH(W)FACTOR?
?s s16 and cns

         349753  S16
          90927  CNS
     S17   4405  S16 AND CNS
?s s17 and ventricle

           4405  S17
         147575  VENTRICLE
     S18     55  S17 AND VENTRICLE
?x s18 and subependyma?

>>>Unrecognizable Command
?s s18 and subependyma?

             55  S18
           2814  SUBEPENDYMA?
     S19      1  S18 AND SUBEPENDYMA?
?t s19/7/1
```

19/7/1 (Item 1 from file: 434)
DIALOG(R)File 434:SciSearch(R)

13169683 Genuine Article#: [redacted]2 Number of References: 49

Title: DIVERGENT LINEAGES FOR OLIGODENDROCYTES AND ASTROCYTES ORIGINATING IN THE NEONATAL FOREBRAIN SUBVENTRICULAR ZONE
Author(s): LUSKIN MB; MCDERMOTT K
Corporate Source: EMORY UNIV,SCH MED,DEPT ANAT & CELL BIOL/ATLANTA//GA/30322; NATL UNIV IRELAND UNIV COLL CORK,DEPT ANAT/CORK//IRELAND/
Journal: GLIA, 1994, V11, N3 (JUL), P211-226
ISSN: 0894-1491
Language: ENGLISH Document Type: ARTICLE
Abstract: Although previous studies have revealed that the prenatal rat ventricular zone contains separate progenitor cells for neurons, astrocytes, and oligodendrocytes during the development of the cerebral cortex as early as the beginning of neurogenesis (Luskin et al., 1993; Grove et al., 1993), it is still unclear whether there are bipotential progenitor cells in the neonatal telencephalic subventricular zone which give rise to both astrocytes and oligodendrocytes during the peak of gliogenesis. To investigate this possibility, discrete groups of clonally related cells, generated by infecting progenitor cells of the neonatal subventricular zone with a retroviral lineage tracer, were analyzed ultrastructurally.

An intracerebral injection of retrovirus encoding the reporter gene E. coli beta-galactosidase (lacZ) was made into the subventricular zone of newborn rats. Two weeks later their brains were perfused, sectioned, and histochemically reacted with X-Gal to identify at the light microscopic level clones of lacZ-positive cells. The sections were processed for electron microscopy to enable the identity of clonally related cells to be assessed at the ultrastructural level.

All of the clones analyzed contained cells of the same phenotype and could be divided into four distinct types: immature cell clones situated in the subependymal zone surrounding the lateral ventricle, oligodendrocytes clones, and white or gray matter astrocyte clones. Not all of the cells in every clone displayed ultrastructural features of a mature cell. Rather, in some glial clones the lacZ-positive cells appeared to be at different stages of differentiation. However, we never encountered clones which contained both macroglial subtypes or clones containing neurons. Although the existence of bipotential progenitor cells cannot be completely dismissed, our results indicate the absence of progenitor cells in vivo in the neonatal subventricular zone which divide and generate astrocytes and oligodendrocytes. (C) 1994 Wiley-Liss, Inc.
?logoff

03nov95 11:39:23 User214264 Session B120.3
$5.58 0.093 Hrs File5
$0.00 1 Type(s) in Format 6
$1.25 1 Type(s) in Format 7
$1.25 2 Types
$0.00 View Fee
$6.83 Estimated cost File5
$1.32 0.044 Hrs File50
$0.00 View Fee
$1.32 Estimated cost File50
$2.04 0.034 Hrs File74

```
              $0.00  1 Type(s) in Format  6
              $6.25  5 Type(s) in Format  7









           $6.25  6 Typ
es
           $0.00  View Fee
     $8.29  Estimated cost File76
           $3.18    0.053 Hrs File144
     A          T$0.00  3 TZype(s) in For
mat  6
              $3.30  3 Type(s) in Format  7
           $3.30  6 Types
           $0.00  View Fee
     $6.48  Estimated cost File144
           $2.46    0.082 Hrs File155
              $0.00  1 Type(s) in Format  6
              $0.17  1 Type(s) in Format  7
           $0.17  2 Types
           $0.00  View Fee
     $2.63  Estimated cost File155
           $0.36    0.006 Hrs File185
           $0.00  View Fee
     $0.36  Estimated cost File185
           $0.27    0.003 Hrs File295
           $0.00  View Fee
     $0.27  Estimated cost File295
           $8.73    0.097 Hrs File399
              $2.40  8 Type(s) in Format  6
           $2.40  8 Types
           $0.00  View Fee
+
     $11.13  Estimated cost File399
+         +  $2.04    0.017 Hrs File434
              $0.00  1 Type(s) in Format  6
              $3.20  2 Type(s) in For
OK
```